CALIFORNIA REGIONAL WATER QUALITY CONTROL BOARD
CENTRAL VALLEY REGION

MONITORING AND REPORTING PROGRAM NO.
FOR
CITY OF SACRAMENTO UTILITIES DEPARTMENT
SACRAMENTO RIVER WATER TREATMENT PLANT
SACRAMENTO COUNTY

This Monitoring and Reporting Program (MRP) describes requirements for monitoring raw and treated water, flocculation/sedimentation basin and filter backwash lagoon supernatant (wastewater), wastewater lagoons and basins (ponds), and water treatment sludge. This MRP is issued pursuant to Water Code Section 13267. The Discharger shall not implement any changes to this MRP unless and until a revised MRP is issued by the Executive Officer. Regional Water Board staff shall approve specific sample station locations prior to implementation of sampling activities.

All samples shall be representative of the volume and nature of the discharge or matrix of material sampled. The time, date, and location of each grab sample shall be recorded on the sample chain of custody form. Field test instruments (such as those used to measure pH and dissolved oxygen) may be used provided that:

1. The operator is trained in proper use and maintenance of the instruments;
2. The instruments are calibrated prior to each monitoring event;
3. The instruments are serviced and/or calibrated per the manufacturer's recommended frequency; and
4. Field calibration reports are submitted as described in the "Reporting" section of the MRP.

RAW AND TREATED WATER MONITORING

The Discharger shall monitor the quantity and quality of raw water from the river and treated water. The Discharger shall establish permanent monitoring stations within the WTP as needed to ensure that all samples are representative of these streams. At a minimum, the Discharger shall monitor raw and treated water as follows:

Constituent	Units	Sample Type	Sampling Frequency	Reporting Frequency
Flow	gpd	Meter observation	Daily	Monthly
Total Dissolved Solids	mg/L	Grab	Monthly	Monthly
pH	Standard	Grab	Monthly	Monthly
Dissolved Metals [1, 2]	ug/L	Grab	Quarterly	Monthly
Standard Minerals [3]	mg/L	Grab	Quarterly	Monthly

[1] At a minimum, the following metals shall be included: arsenic, cadmium, chromium, copper, iron, lead, magnesium, manganese, mercury, molybdenum, nickel, silver, thallium, vanadium, and zinc.

[2] Samples shall be filtered through a 0.45-micron filter prior to preservation.

[3] Standard Minerals shall include, at a minimum, the following elements/compounds: bromide, chloride, fluoride, and sodium.

SUPERNATANT WASTEWATER MONITORING

One sample of supernatant liquid from each type of pond shall be collected and shall be considered representative of the discharge. Wastewater monitoring shall include the following:

Constituent	Units	Sample Type	Sampling Frequency	Reporting Frequency
Flow	gpd	Meter observation	Daily	Monthly
Total Dissolved Solids	mg/L	Grab	Monthly	Monthly
pH	Standard	Grab	Monthly	Monthly
Dissolved Metals [1, 2]	ug/L	Grab	Quarterly	Monthly
Standard Minerals [3]	mg/L	Grab	Quarterly	Monthly

[1] At a minimum, the following metals shall be included: arsenic, cadmium, chromium, copper, iron, lead, magnesium, manganese, mercury, molybdenum, nickel, silver, thallium, vanadium, and zinc.

[2] Samples shall be filtered through a 0.45-micron filter prior to preservation.

[3] Standard Minerals shall include, at a minimum, the following elements/compounds: bromide, chloride, fluoride, and sodium.

POND MONITORING

Each open pond or lagoon shall be monitored as specified below.

Parameter	Units	Type of Sample	Sampling Frequency	Reporting Frequency
Freeboard [1]	0.1 feet	Staff gauge observation	Weekly	Monthly

[1] If the pond is empty on the scheduled monitoring date, the Discharger may report the freeboard monitoring result as “dry”.

POND LINER INSPECTION

The concrete liner of each pond and lagoon shall be inspected at least once per year. The location and severity of any cracking, spalling, or other damage shall be recorded along with specific recommendations for repairs as needed to prevent pond leakage.

~~SLUDGE MONITORING~~

~~One sample of drained sludge solids shall be collected from each sludge lagoon at the frequency indicated below, and equal aliquots of these samples shall be composited to create one sample that shall represent the waste. Each composite sample shall be~~

~~subjected to the California Waste Extraction Test (WET) using deionized water as the extractant. The extract shall be analyzed as follows:~~

~~Constituent~~	~~Units~~	~~Sample Type~~	~~Sampling Frequency~~	~~Reporting Frequency~~
~~Total Dissolved Solids~~	~~mg/L~~	~~Grab~~	~~Quarterly~~	~~Monthly~~
~~pH~~	~~Standard~~	~~Grab~~	~~Quarterly~~	~~Monthly~~
~~Soluble Metals [1]~~	~~ug/L~~	~~Grab~~	~~Quarterly~~	~~Monthly~~
~~Standard Minerals [2]~~	~~mg/L~~	~~Grab~~	~~Quarterly~~	~~Monthly~~

~~[1] At a minimum, the following metals shall be included: arsenic, cadmium, chromium, copper, iron, lead, magnesium, manganese, mercury, molybdenum, nickel, silver, thallium, vanadium, and zinc.~~

~~[2] Standard Minerals shall include, at a minimum, the following elements/compounds: bromide, chloride, fluoride, and sodium.~~

SLUDGE DISPOSAL MONITORING

The Discharger shall maintain a written log of all sludge disposal activities. For each discrete quantity of sludge removed from the facility, the log shall contain the following information:

1. Date.
2. Name and signature of the recorder of the entry.
3. Volume or weight of sludge removed.
4. Name and address of permitted disposal site~~user (business, contractor, or landowner, as applicable)~~.
5. Transport method.
6. Transporter.

~~7.Destination and planned use.~~

REPORTING

In reporting monitoring data, the Discharger shall arrange the data in tabular form so that the date, sample type (e.g., water, wastewater, ~~storage~~ pond, ~~reuse areas,~~ etc.), and reported analytical result for each sample are readily discernible. The data shall be summarized in such a manner to clearly illustrate compliance with waste discharge requirements and spatial or temporal trends, as applicable. The results of any monitoring done more frequently than required at the locations specified in the Monitoring and Reporting Program shall be reported to the Regional Water Board.

A. Monthly Monitoring Reports

Monthly reports shall be submitted to the Regional Water Board on the **1st day of the second month following sampling** (i.e. the January Report is due by 1 March). At a minimum, the reports shall include:

1. Results of all water, wastewater, pond, sludge monitoring, and sludge disposal monitoring performed during the month, including all daily, monthly, and quarterly sampling data;
2. A comparison of monitoring data to the discharge specifications and an explanation of any violation of those requirements. Data shall be presented in tabular format;
3. If requested by staff, copies of laboratory analytical report(s); and

A calibration log verifying calibration of all hand-held monitoring instruments and devices used to comply with the prescribed monitoring program.

B. Annual Report

An Annual Report shall be submitted to the Regional Water Board by **1 February** each year. In addition to the data normally presented, the Annual Report shall include the following:

1. The contents of the regular monthly monitoring report for the last sampling event of the year.
2. Volume of raw water treated during the previous year.
3. A detailed description of any operational changes or new systems for sludge handling or dewatering.
4. If requested by staff, tabular and graphical summaries of all data collected during the year with data arranged to confirm compliance with the WDRs.
5. A comparison of supernatant ~~and sludge~~ monitoring results for the year to the Groundwater Limitations, and a detailed explanation of significant differences, if any.
6. A summary pond liner inspection report and documentation of all liner repairs recommended and completed.
7. ~~6.~~ A summary of sludge disposal practices for the year, including tabulation of all sludge disposal monitoring data.
8. ~~7.~~ A discussion of compliance and the corrective action taken, as well as any planned or proposed actions needed to bring the discharge into full compliance with the waste discharge requirements.
9. ~~8.~~ A discussion of any data gaps and potential deficiencies/redundancies in the monitoring system or reporting program.

~~9.~~10. A forecast of influent flows for the coming year, as described in Standard Provision No. E.4.

A letter transmitting the self-monitoring reports shall accompany each report. The letter shall include a discussion of requirement violations found during the reporting period, and actions taken or planned for correcting noted violations, such as operation or facility modifications. If the Discharger has previously submitted a report describing corrective actions and/or a time schedule for implementing the corrective actions, reference to the previous correspondence will be satisfactory. The transmittal letter shall contain the penalty of perjury statement by the Discharger, or the Discharger's authorized agent, as described in the Standard Provisions General Reporting Requirements Section B.3.

The Discharger shall implement the above monitoring program as of the date of this Order.

Ordered by: _____
PAMELA C. CREEDON, Executive Officer

_____
(Date)

ALO:04/25/07~~04/23/07~~~~04/10/07~~